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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AMY R. GRIFFIN

Appeal 2007-2871
Application 09/893,619
Technology Center 3600

Decided: June 27, 2008

Before TERRY J. OWENS, HUBERT C. LORIN, and
JOHN C. KERINS, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Amy Griffin (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1-4, 7-13, 17-28, 31-35, and 39-46. Claims 5, 6, 14-16, 29, 30, and 36-38 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Claim 12

The Appellant made a separate argument for the patentability of claim 12 in the Brief (App. Br. 12-13). The Examiner responded by stating that “[r]egarding the arguments for claim 12 the appellants arguments are persuasive and the previous rejections are withdrawn.” Answer 13. Accordingly, the rejection of claim 12 has been withdrawn by the Examiner. Thus, the rejection of claim 12 is not before the Board and will not be addressed in deciding this appeal.

SUMMARY OF DECISION

We AFFIRM.¹

THE INVENTION

The invention relates to an apparatus and method for positioning an object with a lift table. Referring to Fig. 1 below, the claimed lift table (10) comprises three sections. The first section has a mechanism capable of movement in a vertical direction. This is shown by lift mechanism (60) which moves middle plate (30) in the vertical direction. Referring to Fig. 7, the second section is a sliding mechanism (70) comprising slider block (190) having slide rails (182) and a block (198) threadably engaged with a lead screw (196) for moving the block (198). The third section disposed over the

¹ Our decision will make reference to Appellant’s Appeal Brief (“App. Br.,” filed May 9, 2005), the Examiner’s Answer (“Answer,” mailed Mar. 20, 2006), and Reply Brief (“Reply Br.,” filed May 18, 2006)

sliding mechanism (70) is depicted in Fig. 1 as upper plate (40). Block (198) of the sliding mechanism (60) is to be attached to the bottom surface of upper plate (40) such that, in operation, the upper plate moves horizontally relative to the middle plate. This occurs because the slide mechanism (70) is situated between the upper plate (40) and the middle plate (30), thus allowing horizontal movement of upper plate (40) relative to middle plate (30). Concomitantly, lift mechanism (60) allows middle plate (30) to move vertically relative to upper plate (40).

Fig. 1 of the Specification is reproduced below:

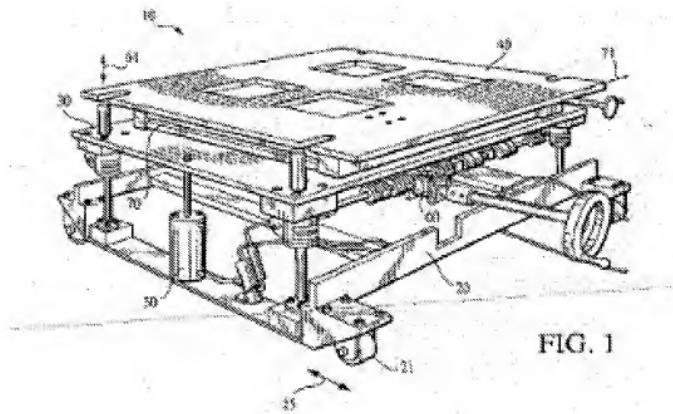


FIG. 1

Figure 1 of the Specification is said to depict "a perspective view of a lift and align table in accordance with an embodiment of the present invention." Specification 3.

Fig. 7 of the Specification is reproduced below:

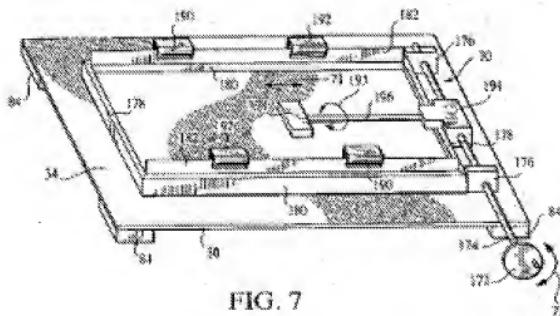


Figure 7 of the Specification is said to depict “a perspective view of a slide mechanism in accordance with an embodiment of the present invention.” Specification 4.

The independent claims are 1 (apparatus), 13 (apparatus), 25 (apparatus), 34 (apparatus), 35 (method), and 41 (method). Claims 1 and 35, reproduced below, are illustrative of the subject matter on appeal.

1. An apparatus for positioning an object comprising:

a first section having a lifting mechanism capable of movement in a vertical direction;

a second section disposed over said lifting mechanism capable of moving corresponding to said lifting mechanism, said second section having a first sliding mechanism capable of movement in a first horizontal direction, said first sliding

mechanism comprising a block and a lead screw for moving said block, and further comprising slider blocks having slide rails; and

 a third section disposed over said sliding mechanism and attached to said block and in contact with said slider blocks, capable of moving in response to movement of said sliding mechanism and said lifting mechanism, said third section having a surface for supporting an object.

35. A method for positioning an object comprising:

 providing a table having a support section adapted to move vertically and horizontally;

 placing an object on said support section;

 moving said table toward a desired destination for said object;

 operating a lift mechanism to move said support section vertically, wherein operating said lift mechanism comprises manually rotating an input shaft attached to jacking mechanisms and supplying a pressurized gas to gas cylinder assemblies to assist moving said support section;

 operating a slide mechanism to move said support section horizontally;

 said object being positioned in a desired location by said moving and operating actions.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Beach	US 2,931,519	Apr. 5, 1960
Mills	US 4,461,455	Jul. 24, 1984
Shiiba	US 4,643,630	Feb. 17, 1987
Bressler	US 6,136,375	Oct. 24, 2000
Nemoto	US 6,271,657 B1	Aug. 7, 2001

The following rejections are before us for review:

1. Claims 1, 8-11, 25, 32, and 33 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beach and Bressler.
2. Claims 2-4, 7, 26-28, and 31 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Bressler, and Mills.
3. Claims 13, 17, 19-24, and 34 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, and Nemoto.
4. Claim 18 is rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, Nemoto, and Bressler.
5. Claims 35, 39-42, 44, 45, and 46 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, and Nemoto.
6. Claim 43 is rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, Nemoto, and Shiiba.

ISSUES

The issues before us are whether the Appellant has shown that the Examiner erred in rejecting claims 1, 8-11, 25, 32, and 33 as unpatentable over Beach and Bressler; claims 2-4, 7, 26-28, and 31 as unpatentable over

Beach, Bressler, and Mills; claims 13, 17, 19-24, and 34 as unpatentable over Beach, Mills, and Nemoto; claim 18 as unpatentable over Beach, Mills, Nemoto, and Bressler; claims 35, 39-42, 44, 45, and 46 as unpatentable over Beach, Mills, and Nemoto; and, claim 43 as unpatentable over Beach, Mills, Nemoto, and Shiiba, all under §103.

FINDINGS OF FACT

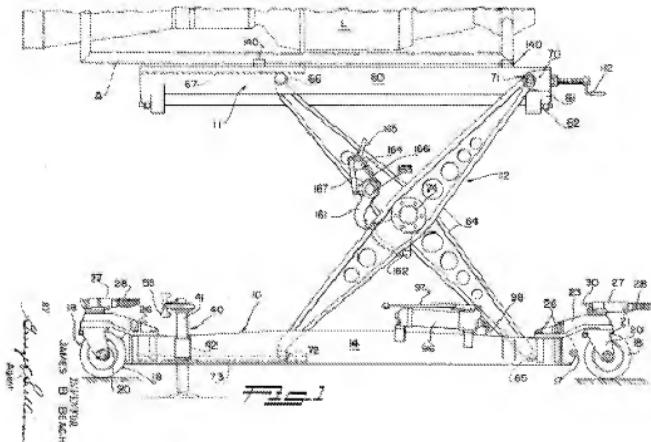
We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

The scope and content of the prior art

1. Beach describes a dolly useful for installing or removing aircraft engines.
2. The Examiner found that Beach “teaches … a first section (10) having a lifting mechanism (12) capable of movement in a vertical direction; a second section (11) disposed over said lifting mechanism (12) and capable of moving with said lifting mechanism, said second section having a first sliding mechanism, said first sliding mechanism comprising a block (113) and a lead screw (110) for moving said block; and a third section (13) disposed over said sliding mechanism and attached to said block, capable of moving in response to said lifting and sliding

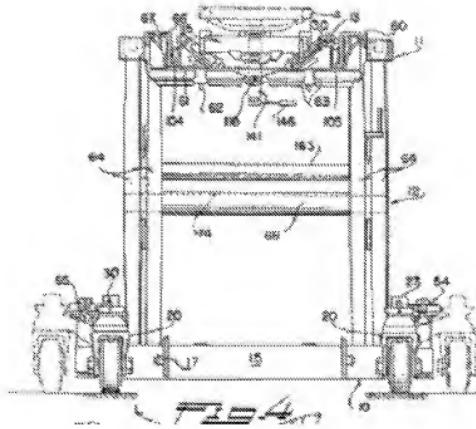
mechanisms, wherein said third section has a surface (a) for supporting an object." Answer 5.

3. The Examiner's characterization of what Beach describes is accurate. See Beach Figs. 1, 4, and 9
4. Beach Fig. 1 is reproduced below:



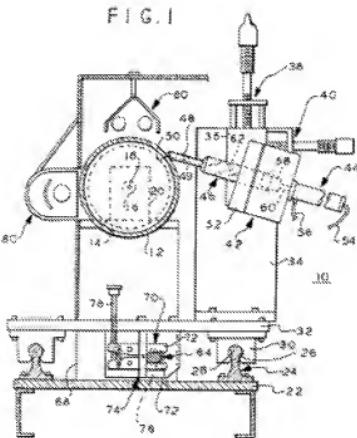
Beach Fig. 1 is said to depict "a side elevation of the truck of the invention showing the load carrying frame in an elevated position, with the load appearing in broken lines." Col. 2, ll. 17-19.

5. Beach Fig. 4 is reproduced below:

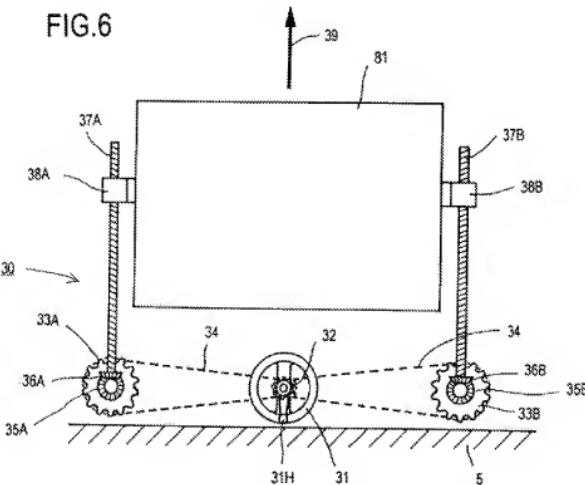


Beach Fig. 9 is said to depict "an enlarged fragmentary vertical sectional view taken as indicated by line 9-9 on Figure 2." Col. 2, ll. 43-44.

7. Bressler is related to rotogravure printing.
8. Bressler describes guide rails and guide blocks (see elements 24 (guide rails) and 30 (guide blocks) in Fig. 1).
9. Bressler Fig. 1 is reproduced below:



10. Mills describes an aircraft engine lifting and positioning apparatus involving the use of jack screws and pneumatic elements. See e.g., discussion at col. 5.
11. Nemoto describes a positioner for positioning a semiconductor device and describes a prior art jack mechanism involving the use of a crank to lift an object. See element 31 in Fig. 6.
12. Nemoto Fig. 6 is reproduced below:



Nemoto Fig. 6 is said to depict “a front view illustrating the general construction of an example of the prior art jack mechanism for moving a relatively less heavy test head vertically upwardly and downwardly.” Col. 8, ll. 49-52.

13. Shiiba describes a heavy object loading jig involving the use of pressurized gas to operate a pneumatic assembly. Col. 2, ll. 41-46.

Any differences between the claimed subject matter and the prior art

14. The claimed invention combines in one method and system elements and features separately disclosed in the prior art.

The level of skill in the art

15. Neither the Examiner nor the Appellant has addressed the level of ordinary skill in the pertinent art of positioning an object. We will therefore consider the cited prior art as representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error ‘where the prior art itself reflects an appropriate level and a need for testimony is not shown’”) (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

Secondary considerations

16. There is no evidence on record of secondary considerations of non-obviousness for our consideration.

PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.”) The Court in *Graham* further noted that evidence of secondary considerations “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” 383 U.S. at 18.

ANALYSIS

The rejection of claims 1, 8-12, 25, 32, and 33 under 35 U.S.C. § 103(a) as unpatentable over Beach and Bressler.

The Appellant argued claims 1, 8-12, 25, 32, and 33 as a group (App. Br. 9-13). We select claim 1 as the representative claim for this group, and the remaining claims 8-11, 25, 32, and 33 stand or fall with claim 1.

37 C.F.R. § 41.37(c)(1)(vii) (2007). Claim 1 is reproduced *supra*.

The Examiner found that Beach describes the claimed apparatus (see FF 2) except that “Beach does not teach the slide mechanism as having rails and slider blocks.” Answer 5-6. The Examiner relied on Bressler to show that the claimed slider mechanism was known (see FF 8) and determined that “[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention to provide the device taught by Beach with the guide rails and blocks taught by Bressler et al. in order to keep the first and second sections in alignment at all times while allowing for linear adjustments as needed.” Answer 6.

The Appellant argued that Beach fails to show the claim 1 limitation “a third section disposed over said sliding mechanism and attached to said block.” App. Br. 9. (Appellant’s emphasis.) The Appellant also argued that there is no motivation to look to Bressler to modify Beach such that the sliding mechanism comprises “slider blocks having slide rails.” App. Br. 10.

Regarding the Appellant’s first argument.

This argument turns on the scope of the claim.

According to the Examiner, Beach describes “a third section (13) disposed over said sliding mechanism and attached to said block capable of moving in response to said lifting and sliding mechanisms, wherein said third section has a surface (a) for supporting an object.” Answer 5.

The Appellant disputes the Examiner's assertion that the third section (13) is disposed over the sliding mechanism. According to the Appellant, “the third section (13)’ … *is* the sliding mechanism.” App. Br. 10. (Emphasis in original.) According to the Appellant, “[E]lements 113 and 110 in Beach are part of the assembly 13. See column 7, lines 10-50 and Figure 2. The assembly 13 cannot be the claimed ‘sliding mechanism’ and at the same time a ‘third section *disposed over* said sliding mechanism [per claim 1].’” App. Br. 10. Emphasis in original. A similar argument is made in the Reply Brief (p. 2).

The Examiner responded by arguing that “[T]he appellant is correct that the sliding assembly (13) of beach [sic] includes the block (113) and a lead screw (110), but this does not preclude the sliding portion of the assembly from being located above the actuation portion of the assembly as claimed.” Answer 12.

The issue of whether Beach discloses a “third section disposed over said sliding mechanism” (claim 1) turns on the scope of the claim. We do not see anything in the Specification, nor does the Appellant point to such disclosure, which defines the claimed “third section disposed over said sliding mechanism” in a manner to lead one of ordinary skill to interpret the phrase so as to limit the “third section” to something separate and independent of an overall sliding assembly comprising a sliding mechanism. Nor does the claim limit the “sliding mechanism” to all aspects of a sliding assembly. The term “sliding mechanism” is broad and encompasses any

mechanism of a sliding assembly. The broadest reasonable construction to be given the claim in light of the Specification as it would be interpreted by one of ordinary skill in the art is that the apparatus comprises a third section disposed over a sliding mechanism, the third section being open to including a sliding mechanism of a sliding assembly. To view the claimed “third section” as precluding the sliding assembly (13) (see FF 5) of Beach would require reading into the claim a limitation that the “third section” may not include a sliding mechanism. While that may be an embodiment described in the Specification, there is no suggestion in the claim or in the Specification that the claim should be construed narrowly so as to define only that embodiment. “The problem is to interpret claims ‘in view of the specification’ without unnecessarily importing limitations from the specification into the claims.” *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003). Since, to be persuasive, the Appellant’s argument would require us to unnecessarily import limitations from the specification into the claims, we find the Appellant’s argument unpersuasive as to error in the rejection. Cf. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (“Many of appellant’s arguments fail from the outset because, . . . they are not based on limitations appearing in the claims . . .”).

Regarding the Appellant’s second argument.

This argument is directed to the claim limitation “second section . . . further comprising slider blocks having slide rails.”

The Examiner had found that Beach does not teach the slide mechanism as having sliding rails and slider blocks but relied on Bressler as describing these elements (see FF 8 and 9). The Examiner determined that “[i]t would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Beach with the guide rails and blocks taught by Bressler et al. in order to keep the first and second sections in alignment at all times while allowing for linear adjustments as needed.”

Answer 6.

The Appellant argues that the combination is (1) based on hindsight, (2) based on non-analogous art (i.e., Bressler is from the printing industry while Beach is from the aircraft assembly industry), (3) lacks motivation for its combination, and (4) it would not be within the ordinary skill to make the combination.

We are not persuaded by the Appellant’s argument. In effect, the Appellant is arguing that one of ordinary skill in the art would not be led to the claimed combination, given the Beach and Bressler disclosures. We disagree.

The Examiner, after acknowledging that the sliding assembly in Beach does not include sliding rails and slider blocks, noted that Beach and Bressler “are both dealing with sliding a platform, with a difference in guide means, but they are dealing with a similar problem by using different types of equivalent structures in the slide assemblies. As appellant concedes the structures in question are equivalent the examiner believes one of ordinary

skill in the art would know this. Further Bressler was used to teach blocks, merely because the references are moving different types of heavy equipement does not mean they are not analogous.” Answer 12.

The Appellant responded by arguing that “[T]he proposed substitution of components would have made no practical sense, because, as the Examiner’s Answer admits, the references use ‘different types’ of structures for ‘moving different types of heavy equipment.’ Examiner’s Answer, page 12.” Reply Br. 3.

We agree with the Examiner.

There is no dispute that Beach and Bressler describe different mechanisms of sliding a platform and that the claimed apparatus employs the mechanism Bressler describes. However, the claimed subject matter is the result of adding Bressler’s block and rail mechanism to the Beach apparatus. No unpredictable results from such a combination have been shown. FF 16.

Regarding the Appellant’s argument that the Examiner has not provided adequate motivation but, rather, used hindsight to combine the disclosures in the cited references that would lead one of ordinary skill in the art to arrive at the claimed invention, the standard for determining obviousness is not solely dependent on the adequacy of an Examiner’s motivation statement.

The Supreme Court decision in *KSR* has clarified the test for obviousness. In *KSR*, the Supreme Court emphasized “the need for caution

in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The operative question in this “functional approach” is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

The question of whether an improvement is more than the predictable use of prior art elements according to their established functions is relevant here, given the fact that Beach describes the claimed apparatus and that Bressler describes the sliding block and rail mechanism. The Appellant has not argued that these two elements are not disclosed in the prior art. Accordingly, the claimed combination is the result of adding Bressler’s block and rail to the Beach apparatus. “When a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *Id.* at 1739 (quoting *Sakraida v.*

Ag Pro, Inc., 425 U.S. 273, 282, 96 S.Ct. 1532 (1976)). In that regard, the record does not include any objective evidence of unexpected results for the claimed combination. No evidence of unexpected results were submitted to rebut the Examiner's *prima facie* case of obviousness. Therefore, a *prima facie* case of obviousness has been established for the subject matter resulting from adding Bressler's block and rail to Beach's apparatus according to its established sliding unction. Accordingly, it was not necessary, as Appellant appears to argue, that the Examiner show a clear suggestion to combine the teachings of the references in the references before coming to the conclusion that the claimed combination would have been obvious to one of ordinary skill in the art. In light of *KSR*, to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), it is sufficient to show that the claimed system is the combination of prior art elements according to known methods to yield predictable results.

That is not to say that all arrangements of prior art elements are necessarily obvious. As the Supreme Court made clear with respect to the facts before it in *KSR*, "[f]ollowing these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement." *Id.* The Court explained, "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and

the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41. The Court noted that “[t]o facilitate review, this analysis should be made explicit.” *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). However, “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741. In that regard, we are satisfied that the Examiner articulated an apparent reasoning with sufficient rational underpinning to support the legal conclusion of obviousness.

The argument that Beach and Bressler are from non-analogous arts is unpersuasive as to error in the rejection because Beach and Bressler are both directed to positioning objects and are reasonably pertinent to the problem of positioning, the problem the instantly claimed invention is concerned with. See *In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991)(any problem in the field of endeavor and addressed by a patent can provide a reason to combine the elements in the manner claimed at the time of the invention). See also *KSU*, 127 S.Ct. at 1742.

The argument that it would not be within the ordinary skill to make the combination the Examiner suggests is unpersuasive as to error in the rejection for several reasons. First, the Briefs nowhere discuss the level of ordinary skill in the pertinent art of positioning an object such that we are put in a position to decide whether one of ordinary skill would or would not look to Bressler to modify Beach. FF 15. Second, the Appellant argues that it would not be within the ordinary skill to make the combination the Examiner suggests but does provide supporting evidence. We find no evidence supporting the Appellant's contentions elsewhere in the record. *See generally, In re Glass*, 474 F.2d 1015, 1019 (CCPA 1973). An Appellant's attorney's arguments in a brief does not take the place of evidence in the record. *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); *Meitzner v. Mindick*, 549 F.2d 775 (CCPA 1977), *cert. denied*, 434 US 854 (1977), and *In re Schulze*, 346 F.2d 600 (CCPA 1965). Lastly, since we have looked to the references as indicative of the level of skill (FF 15), Beach and Bressler would therefore have been within the knowledge of one of ordinary skill in the pertinent art of positioning an object. As a result, one of ordinary skill would have had the two disclosures in hand and thus would have been in a position to make the combination suggested by the Examiner and thereby reach the claimed combination.

We have considered the Appellant's arguments and find them unpersuasive as to error in the rejection. Accordingly, we will sustain the rejection of claims 1, 8-11, 25, 32, and 33.

The rejection of claims 2-4, 7, 26-28, and 31 under 35 U.S.C. § 103(a) as unpatentable over Beach, Bressler, and Mills.

The Appellant argued claims 2-4, 7, 26-28, and 31 as a group (App. Br. 13-15). We select claim 2 as the representative claim for this group, and the remaining claims 3, 4, 7, 26-28, and 31 stand or fall with claim 2. 37 C.F.R. § 41.37(c)(1)(vii) (2007). Claim 2 reads as follows:

2. The apparatus according to claim 1 wherein said lifting mechanism comprises a jacking screw mechanism.

The Examiner conceded that Beach and Bressler do not teach a jacking screw mechanism (or, for claims 3, 4, 7, 27, 28 and 31) a gas cylinder assembly). The Examiner relied on Mills to show “a device for lifting aircraft engines wherein a first lift assembly is a series of jack screws ... and a second lift assembly is a series of pneumatic lifts.” Answer 7. The Examiner determined that “[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention to provide the lift assemblies taught by Mills et al. in the device taught by Beach in order to allow the apparatus to align the object being lifted with its intended receiver in a manner that minimizes the chance of damage to the object while it is being mounted.” Answer 7.

The Appellant argued that there is no motivation to combine the prior art teaching – “the mechanism of Beach is self sufficient and there is no motivation to modify Beach with the teachings of Mills or vice versa.” App. Br. 14. In the same vein, the Appellant argued that there is not only no motivation but the result would be the addition of a redundant component. Reply Br. 3-4. Appellant also argued that Mills is concerned with a different problem than Beach. Appellant further argued that it would not be within the ordinary skill to make the combination. App. Br. 14-15.

We are not persuaded by the Appellant’s arguments.

There is no dispute, and the Appellant concedes (App. Br. 14), that Mills describes a positioning apparatus using jack assemblies. The claimed subject matter is the result of incorporating a jacking screw mechanism in the assembly resulting from the combination of Beach and Bressler.

The Appellant’s argument that the Examiner has provided *no* motivation is inaccurate. The Examiner clearly explained that “[i]t would have been obvious to one of ordinary skill in the art, at the time of the invention to provide the lift assemblies taught by Mills et al in the device taught by Beach in order to allow the apparatus to align the object being lifted with its intended receiver in a manner that minimizes the chance of damage to the object while it is being mounted.” Answer 7. We are satisfied that the Examiner articulated an apparent reasoning with sufficient rational underpinning to support the legal conclusion of obviousness.

Furthermore, the test for obviousness does not depend solely on finding a motivation to combine references. As we already stated, the Supreme Court decision in *KSR* has clarified the test for obviousness. In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test. In particular, the Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966) (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* The operative question in this “functional approach” is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.* at 1740.

The question of whether an improvement is more than the predictable use of prior art elements according to their established functions is relevant here, given the fact that Mills describes the claimed jacking screw mechanism. The Appellant has not argued that this element is not disclosed in the prior art. Accordingly, the claimed combination is the result of combining Mills’ jacking screw mechanism with the Beach/Bressler combination. “When a patent ‘simply arranges old elements with each

performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious." *Id.* at 1739 (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282, 96 S.Ct. 1532 (1976)). In that regard, the record does not include any objective evidence of unexpected results for the claimed combination. No evidence of unexpected results were submitted to rebut the Examiner's *prima facie* case of obviousness. Therefore, a *prima facie* case of obviousness has been established for the claimed subject matter. In light of *KSR*, to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), it is sufficient to show that the claimed system is the combination of prior art elements according to known methods to yield predictable results, and that has been done here.

As to the argument that Mills is concerned with a different problem than Beach, "[u]nder the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 1742.

The Appellant further argued that it would not be within the ordinary skill to make the combination. App. Br. 14-15. Again, the Briefs nowhere discuss the level of ordinary skill in the pertinent art of positioning an object to put us in a position to decide whether one of ordinary skill would or would not look to Mills to modify Bressler. FF 15.

Accordingly, we will sustain the rejection of claims 2-4, 7, 26-28, and 31.

The rejection of claims 13, 17, 19-24, and 34 under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, and Nemoto.

The Appellant argued claims 13, 17, 19-24, and 34 as a group (App. Br. 15-19). We select claim 13 as the representative claim for this group, and the remaining claims 17, 19-24, and 34 stand or fall with claim 13. 37 C.F.R. § 41.37(c)(1)(vii) (2007). Claim 13 reads as follows:

13. An adjustable support for positioning a piece of equipment comprising:

a base frame, a first section, and a second section;

a lifting mechanism disposed between said base frame and said first section for lifting and lowering said first section in a vertical direction with respect to said base frame, said lifting mechanism comprising a jacking screw mechanism and a gas cylinder assembly, said jacking screw mechanism having a manual drive mechanism; and

a first sliding mechanism disposed between said first section and said second section for sliding said second section with respect to said first section, said sliding occurring in a direction perpendicular to said vertical direction, said second section having a surface to support a piece of equipment.

Claim 13 is similar in subject matter to claim 2 but includes a gas cylinder and limits the jacking screw mechanism to one having a manual drive mechanism. The Examiner concedes that this latter feature is not taught in Beach and Mills and relies on Nemoto for a manually turned crank to lift an object. See FF 11.

Appellant argues that there is no motivation to combine (App. Br. 15-17). e.g.,: “[T]here is no motivation or reason to add to Beach’s lift assembly extra ‘jack crews’ or ‘air bellows’ of Mills. Such a ‘modification’ would be unnecessary and impractical.” App. Br. 17. “Why would anyone replace such a system in Mills with a ‘manually turned crank’ from Nemoto? There is absolutely no motivation for such a drastic change.” App. Br. 17. A similar argument is made in the Reply Brief: “there is absolutely no reason to ‘augment’ Beach with Nemoto’s device because it would (1) be redundant, (2) require a wholesale redesign of Beach and (3) the ‘problem’ asserted by the Examiner’s Answer does not exist.” Reply Br. 4.

We do not find these arguments persuasive as to error in the rejection. The Examiner did in fact provide motivation to combine. See Answer 8. Moreover, as we have already stated, the Supreme Court decision in *KSR* has clarified the test for obviousness. In *KSR*, the Supreme Court emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

The question here is whether the improvement is more than the predictable use of prior art elements according to their established functions. The Appellant has not argued that the elements claimed are not disclosed in cited references. Accordingly, the claimed subject matter is the result of combining the elements variously described in the references. “When a

patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *Id.* at 1739 (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282, 96 S.Ct. 1532 (1976)). In that regard, the record does not include any objective evidence of unexpected results for the claimed combination. No evidence of unexpected results were submitted to rebut the Examiner’s prima facie case of obviousness. Therefore, a prima facie case of obviousness has been established for the claimed subject matter.

As to the Appellant’s argument that incorporating Nemoto’s air cylinders would require a wholesale redesign of Beach, this is based on the Appellant’s view that the “Nemoto air cylinders do not function to lift its load.” Reply Br. 4. This is not commensurate in scope with what is claimed. Claim 34 does not require the air cylinders to lift but rather to “*assist* said jacking screws in said lifting and lowering mechanism.” Emphasis added.

As to the Appellant’s argument that the “problem” asserted by the Examiner’s Answer does not exist, “[u]nder the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* at 1742.

The Appellants also made an argument that the Examiner misrepresented Mills. According to the Appellant, in contrast to what the Examiner stated, “Mills does not teach or suggest that its jack assemblies

and air bellow ‘work in tandem to raise the load.’” App. Br. 18. We do not see the relevance of this clarification to the patentability of the claims since the claims nowhere require the jack assemblies and air bellows to work in tandem.

Accordingly, we will sustain the rejection of claims 17, 19-24, and 34.

The rejection of claim 18 is rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, Nemoto, and Bressler.

Claim 18 reads as follows:

18. The support according to claim 17 wherein said sliding mechanism comprises a lead screw and block mechanism.

The Examiner relied on Bressler to show as known the subject matter of this claim. Answer 9. The Examiner determined that it would have been obvious “to provide the device taught by Beach, Mills et al. and Nemoto with the guide rails and blocks taught by Bressler et al. in order to keep the first and second sections in alignment at all times while allowing for linear adjustments as needed.” Answer 9.

The Appellant made a similar non-analogous art argument as that raised with respect to the rejection of claim 1. App. Br. 19-20. E.g., “There is absolutely no reason to substitute into Beach a sliding assembly from the printing industry as taught by Bressler.” App. Br. 20. The argument that Beach and Bressler are from non-analogous arts is unpersuasive as to error in the rejection because Beach and Bressler are both directed to positioning objects and are reasonably pertinent to the problem of positioning that the

instantly claimed invention is concerned with. See *In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991)(any problem in the field of endeavor and addressed by a patent can provide a reason to combine the elements in the manner claimed at the time of the invention). See also *KSR*, 127 S.Ct. at 1742.

The rejection of claims 35, 39-42, 44, 45, and 46 are rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, and Nemoto.

The Appellant argued claims 35, 39-42, 44, 45, and 46 as a group (App. Br. 20-21). We select claim 35 (see *supra*) as the representative claim for this group, and the remaining claims 39-42, 44, 45, and 46 stand or fall with claim 35. 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Appellant argues that Mills teaches using either jacking screws or hydraulic pneumatic cylinders, not cylinders assisting the jacking screws as required by the claims. App. Br. 20 (see also the Reply Br. 6). However, the Examiner also relied on Nemoto as showing cylinders assisting jacking screws. See Answer 10 and 16. This can be evidenced in Fig. 2A of Nemoto, as discussed at col. 14. This is not addressed.

Appellant also argues that limitations of claims 41, 42, 44, 45, and 46 are not taught or suggested in the references. App. Br. 21. However, nothing more is said. A general allegation that the art does not teach any of the claim limitations is no more than merely pointing out the claim limitations. A statement which merely points out what a claim recites will not be

considered an argument for separate patentability of the claim. 37 C.F.R. 41.37(c)(1)(vii).

The rejection of claim 43 is rejected under 35 U.S.C. § 103(a) as unpatentable over Beach, Mills, Nemoto, and Shiiba.

Claim 43 reads as follows:

43. The method according to claim 41 wherein operating said lift mechanism comprises supplying a pressurized gas to said gas cylinder assemblies.

The Examiner relied on Shiiba as describing the subject matter of claim 43. Answer 11.

The Appellant argued that there is no motivation to combine the references to reach the claimed invention. App. Br. 22 and Reply Br. 7. The Appellant appears to take issue with the Examiner's statement of motivation, i.e., "in order to make use of readily available source of power that requires no special knowledge to tap and use" (Answer 11) and "to positively cite providing a pressurized gas to a lifting device" (Answer 16). However, as we have already stated, the Supreme Court decision in *KSR* has clarified the test for obviousness. In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *id.* at 1739, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

The question here is whether an improvement is more than the predictable use of prior art elements according to their established functions. The Appellant has not argued that the elements claimed are not disclosed in cited references. Accordingly, the claimed subject matter is the result of combining the elements variously described in the references. “When a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *Id.* at 1739 (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282, 96 S.Ct. 1532 (1976)). In that regard, the record does not include any objective evidence of unexpected results for the claimed combination. No evidence of unexpected results were submitted to rebut the Examiner’s prima facie case of obviousness. Therefore, a prima facie case of obviousness has been established for the claimed subject matter.

CONCLUSIONS OF LAW

We conclude the Appellants have failed to show that the Examiner erred in rejecting claims 1, 8-11, 25, 32, and 33 as unpatentable over Beach and Bressler; claims 2-4, 7, 26-28, and 31 as unpatentable over Beach, Bressler, and Mills; claims 13, 17, 19-24, and 34 as unpatentable over Beach, Mills, and Nemoto; claim 18 as unpatentable over Beach, Mills, Nemoto, and Bressler; claims 35, 39-42, 44, 45, and 46 as unpatentable over

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Beach, Mills, and Nemoto; and, claim 43 as unpatentable over Beach, Mills, Nemoto, and Shiiba, all under §103.

DECISION

The decision of the Examiner to reject claims 1-4, 7-11, 13, 17-28, 31-35, and 39-46 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a) (1)(iv) (2007).

AFFIRMED

vsh

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